

UPX-10

#### **FEATURES**

#### WIRELESS CUE IFB SYSTEM

- Specially tailored audio companding circuits for excellent audio quality
- Mic- or line-level input
- Audio matched to wired PL and IFB systems
- Eight-segment LED-bargraph audio display
- Crystal-controlled stability on one of 1,700 available frequencies

#### **BELTPACK**

- Dual channel
- Rugged ABS plastic case
- High audio output for noisy environments
- Rechargeable battery option
- Low-battery indicator
- Compatible with Clear-Com wireless intercom system

## **APPLICATIONS**

- "On Camera" talent cueing (IFB)
- Audio/intercom monitoring for technical personnel
- Fast, simple setup of TV engineer remotes
- "Listen Only" intercom to stage personnel and equipment room operators
- One-way communication to cable-inaccessible locations

#### **GENERAL DESCRIPTION**

Clear-Com's wireless monitoring system is designed for IFB/talent cueing, PL/intercom "listen-only monitoring", and other audio monitoring applications.

Consisting of the model UPX-10 base-station transmitter and the model RCV-2 dual-channel miniature portable receiver, this system provides professional sound quality and excellent range in a small package. Total mobility and flexibility of talent and technical personnel can be obtained with this high-band VHF system. It provides reliable communications throughout the studio, field, or theater environments with the availability of over 1700 possible frequencies.

The system features audio processing (companding) to reduce noise and interference, and to extend the system's useful operating range.

### BASE STATION TRANSMITTER

The UPX-10 stand-alone base station wireless transmitter accepts either micor line-level audio input. It may be programmed to be plug-in compatible with Clear-Com's IFB or party-line systems or with other popular 2-wire systems.

Transmitter power output is a full 50 mW – much higher than FCC Part 15 transmitters. A whip antenna is supplied with the system but a remote antenna may be used.

## **BODYPACK RECEIVER**

The RCV-2 private-line miniature receiver is a switchable dual-channel receiver designed for maximum flexibility. For instance, one channel is set to receive IFB from the UPX-10 base station and the other can be set to monitor a Clear-Com wireless intercom. The RCV-2 miniature receiver meets the requirements for professional audio quality in any personal receiver environment. Outstanding sensitivity, high interference rejection, very high quality audio, and advanced circuit design make the RCV-2 the professional choice in remote receiver applications.



RCV-2 Receiver

The receiver is crystal-controlled for stability and incorporates a sensitive RF preamplifier for increased range and maximum selectivity. Extensive RF and IF filtering and audio processing circuitry make the RCV-2 the most selective, sensitive, and best-sounding private-line receiver available.

Our experience, dependability, and attention to detail are just a few of the reasons why Clear-Com wireless systems are the choice of professionals worldwide.



### **SPECIFICATIONS**

#### **UPX-10 VHF REMOTE TRANSMITTER**

Operating Frequency: 169-216 MHz Frequency Control: Crystal, single frequency RF Power Output: 45-50 mW Range: 1,500 ft under ideal conditions Modulation: Direct FM Maximum Deviation: ±7.5 kHz Preemphasis: 167 µs

#### INPUT CONFIGURATION

Standard: Balanced line- or mic-level audio
Internally programmable: Clear-Com wiredintercom/IFB compatible (one channel only)
Audio Input Level: Line, -10 to +20 dBu;
mic, -40 to -10 dBu
Audio Input Adjustment Range: 30 dB, nominal
Shaping Adjustments: Low, +10 dB; high, ±10 dB
Audio Freq. Response: 90 Hz to 11 kHz, ±3 dB
Noise-Reduction System: Two-ended 2:1
logarithmic companding
User-Selectable Audio Processing: Linear; ALC
(35-dB range); compressed (2:1)

# USER ACCESSIBLE CONTROLS AND INDICATORS, AND CONNECTORS

Front Panel: Power on/off switch; power-on LED; audio input level-adjust; VU meter (10-segment LED)

Rear Panel: Audio input connector (XLR-3F); audio-processing switch (compressed, linear, ALC); audio input level (two-position slide switch-mic/line); low- and high-frequency AF response adjustments (screwdriver adjustable); DC power input; RF output Power Required: 12-20 VDC, 200 mA, maximum Power Supply (provided): Wall mount, 12 VDC, 500 mA, unregulated Dimensions: 1.75" H x 17" W x 5.1" D

Dimensions: 1.75" H x 17" W x 5.1" D (44 x 430 x 130 mm), excluding detachable rack-mount ears

Weight: 3.2 lbs (1.5 kg)

#### **RCV-2 MINIATURE RECEIVER**

Frequency Range: 169-216 MHz Number of Frequencies: One or two; 1.5 MHz maximum separation

#### **AUDIO RESPONSE**

Frequency Stability: ±0.005%
Deviation Acceptance: ±10 kHz
Squelch: Internally adjustable, with hysteresis
Noise-Reduction System: 2:1 logarithmic
companding
IF Filter Poles: 6
Image Rejection: 40 dB, minimum
Deemphasis: 167µs
Sensitivity: 2.5 µV, maximum, for 50 dB S/N

#### **AUDIO RESPONSE**

Frequency Response: 70 Hz to 9 kHz, ±3 dB Harmonic Distortion: <1%, typical Signal-To-Noise Ratio: 80 dB, minimum Audio Output: 200 mW, minimum, into 8 Ω; 5 V

#### **POWER**

Battery: 9-volt, alkaline or rechargeable Current Drain: 3 mA, typical, at nominal output levels

Battery Charging: Provisions for charging 9-volt ni-cad battery via external contacts suitable for drop-in charger

## CONTROLS, CONNECTORS, AND INDICATORS

Controls: Off/Frequency Select volume control Indicator: Low-battery LED Audio Output Connector: Standard monaural minijack Antenna: Headset cable

Case Size: 4" H x 2.5" W x 1" D (100 x 65 x 24 mm)

Weight: 5.5 oz. (160 g), with battery

All specifications are subject to change without notice.

